

In the claims

The following amendments are made with respect to the claims in the International application PCT/GB2004/003176.

This listing of claims will replace all prior versions and listings of claims in this application.

1 (original). A sensor comprising a medium and, disposed therein, a hologram, wherein an optical characteristic of the hologram changes as a result of a variation of a physical property of the medium, and wherein the hologram is formed as a non-planar mirror.

2 (currently amended). ~~[[A]]~~ The sensor according to claim 1, wherein the hologram is formed as a concave mirror.

3 (currently amended). ~~[[A]]~~ The sensor according to claim 1, wherein the hologram is formed as a convex mirror.

4 (currently amended). ~~[[A]]~~ The sensor according to claim 1, wherein the hologram is formed as a corner cube prism.

5 (currently amended). A method for the production of ~~a sensor according to any of claims 1 to 4, which~~ a sensor comprising a medium and, disposed therein, a hologram, wherein an optical characteristic of the hologram changes as a result of a variation of a physical property of the medium, and wherein the hologram is formed as a non-planar mirror; wherein said method comprises forming, in a medium, a hologram as a non-planar mirror.

6 (currently amended). ~~[[A]]~~ The method according to claim 5, wherein the hologram is recorded in a non-planar medium.

7 (currently amended). ~~[[A]]~~ The method according to claim 6, wherein the hologram is recorded using a planar mirror.

8 (currently amended). ~~[[A]]~~ The method according to claim 5~~[[or 6]]~~, wherein the hologram is recorded using a non-planar mirror.

9 (currently amended). [[A]] The method according to claim 8, wherein the hologram is recorded using a concave mirror.

10 (currently amended). [[A]] The method according to claim 8, wherein the hologram is recorded using a mirror capable of effecting retroreflection.

11 (currently amended). [[A]] The method according to claim 10, wherein the hologram is recorded using a corner cube prism.

12 (currently amended). [[A]] The method according to claim 8, wherein the hologram is recorded using one or more reflective beads.

13 (currently amended). [[A]] The method according to ~~any of claims 5 to 12~~ claim 5, wherein the hologram is recorded using a lens, aperture, slit or obstacle, or a combination thereof, placed between the light source and the medium.

14 (currently amended). A method for the detection of an analyte, which comprises remotely interrogating, with light, the holographic element of a sensor comprising a medium and, disposed therein, a hologram, wherein an optical characteristic of the hologram changes as a result of a variation of a physical property of the medium, and wherein the hologram is formed as a non-planar mirror; ~~a sensor according to any of claims 1 to 4; and wherein said method further comprises~~ detecting any change in an optical characteristic of the sensor.

15 (currently amended). [[A]] The method according to claim 14, wherein the light is collimated.